CLAIMS:

1.   Method of converting a series of m-bit information words (1) to a modulated
signal (7), with m being an integer, in which method an n-bit code word (4) is delivered for
each received information word (1), with n being an integer exceeding m, and the delivered
code words (4) are modulated to the modulated signal (7), and in which the series of

5   information words is converted to a series of code words so that the corresponding modulated
signal (7) satisfies a predetermined criterion, and in which the code words (4) are spread over
at least a group of a first type (G11,G12) and at least a group of a second type (G2), while the
delivery of a code word belonging to the group of the first type (G11,G12) establishes a
coding state (S1) of a first type determined by the associated group, and the delivery of a

10   code word belonging to the group of the second type (G2) establishes one of r coding states
(S2,S3) of a second type determined by the associated group ánd by the information word (1)
associated to the delivered code word (4),
in which the group of the second type comprises at least one code word being associated with
at most r information words among which the respective information word is distinguishable

15   by evaluating a predetermined parameter of the following code word,
characterized in that
each information word is provided with an associated subset of code words comprising at
least r code words mutually differing in the value of the predetermined parameter, and
the delivered code word is selected based on an additional criterion from the subset of code

20   words excluding all code words not complying with said predetermined criterion and, in the
event that a coding state of the second type has been established by the preceding code word,
excluding all code words having a value of the predetermined parameter not corresponding to
the established coding state of the second type.

25   2.   Method as claimed in claim 1, wherein the additional criterion is controlling a
low frequency content of the modulated signal.

3.   Method as claimed in Claim 2, wherein a running digital sum value is
established as a measure for the low frequency content, which value is determined over a

portion of the modulated signal (7) and denotes for this portion the current value of a difference between the number of bit cells having a first signal value and the number of bit cells having a second signal value, while said selection of the code word is made so as to constrain the digital sum value.

4.   Method as claimed in claim 1, wherein the value of the predetermined parameter is the logical value of p predetermined bits.

5.   Method as claimed in claim 4, wherein the p predetermined bits are the first and thirteenth bit position.

6.   Method as claimed in claim 1, wherein the additional criterion is encoding further information.

7.   Method as claimed in Claim 1, wherein the modulated signal satisfies as the predetermined criterion that each number of successive bit cells having a same signal value is at least $d+1$ and at most $k+1$.

8.   Method as claimed in Claim 7, wherein d is equal to 2 and k is equal to 10.

9.   Method as claimed in Claim 1, 2 or 3, wherein m is equal to 8 and n is equal to 16.

10.   Method as claimed in claim 1, wherein a record carrier (120) is produced by providing a substrate with an information pattern (123,124) representing the modulated signal (7).

11.   Coding device (140) comprising an m-to-n bit converter (60) for converting the m-bit information words to n-bit code words, and means (66,68) for modulating the n-bit code words to a modulated signal, the modulated signal satisfying a predetermined criterion, and state establishing means (64) for establishing, on the delivery of a code word by the converter, a coding state of a first type (S1) for each of the delivered code words belonging to a group (G11,G12) of a first type determined by the associated group, and one of r coding states (S2,S3) of a second type for each of the delivered code words belonging to a group

(G2) of the second type determined by the associated group ánd by the information word
associated to the delivered code word,

in which the group of the second type comprises at least one code word being associated with
at most r information words among which the respective information word is distinguishable

5   by evaluating a predetermined parameter of the following code word,
characterized in that
the m-to-n-bit converter (60) comprises
means for providing for each information word an associated subset of code words
comprising at least r second type of code words mutually differing in a predetermined way,

10   and
means for selecting a code word based on an additional criterion from the subset of code
words excluding all code words not complying with said predetermined criterion and, in the
event that a coding state of the second type has been established by the preceding code word,
excluding all code words having a value of the predetermined parameter not corresponding to

15   the established coding state of the second type.

12.   Coding device as claimed in claim 11, wherein the device comprises means
(141,142) for recording information on a record carrier (143) by recording an information
pattern representing the modulated signal.

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13.   Signal comprising a sequence of successive signal portions (8) each
corresponding to an information word, the signal satisfying a predetermined criterion, in
which signal each of the signal portions (8) comprises n bit cells having a first or second
signal value, a signal portion belonging to a group (G11,G12) of a first type of signal portions

25   uniquely representing an information word, and a signal portion belonging to a group (G2) of
a second type of signal portions in combination with a successive signal portion representing
a unique information word, at least one signal portion of the group of the second type being
associated with at most r information words among which the respective information word is
distinguishable by evaluating a predetermined parameter of the successive signal portion,

30   characterized in that
the signal comprises at least one signal portion selected based on an additional criterion from
a subset of signal portions excluding all signal portions not complying with said
predetermined criterion and, in the event that the preceding signal portion belongs to the

group of the second type, excluding all signal portions having a value of the predetermined parameter not being associated with the respective information word, and

the subset being associated to an information word and comprising at least r signal portions mutually differing in the value of the predetermined parameter.

14.   Signal as claimed in claim 13, wherein the additional criterion is a low frequency content of the modulated signal.

15.   Signal as claimed in claim 13, wherein the predetermined parameter is the logical value of p predetermined bits.

16.   Record carrier (120) on which a signal (7) as claimed in claim 13, 14 or 15 is provided in a track (121) in which information patterns (123,124) represent the signal portions (8), which information patterns comprise first and second parts (123,124) alternating in the direction of the track, the first parts present detectable first properties and the second parts present second properties distinguishable from the first properties, and the parts having the first properties represent bit cells having the first signal value and the parts having the second properties represent the bit cells having the second signal value.

17.   Rendering device comprising means for reading information from a track (9) on a record carrier, which device comprises means for scanning the track and demodulation means for retrieving code words from signal portions (8) of a signal provided in the track, the signal satisfying a predetermined criterion, in which signal each of the signal portions (8) comprises n bit cells having a first or second signal value, a signal portion belonging to a group (G11,G12) of a first type of signal portions uniquely representing an information word, and a signal portion belonging to a group (G2) of a second type of signal portions in combination with a successive signal portion representing a unique information word, and a converter for converting the code words into information words, the converter comprising means for distinguishing the respective information word by evaluating a predetermined parameter of the following code word,

characterized in that

the converter comprises means for converting a code word selected from a subset of code words, the subset being associated to the information word and comprising at least r code words mutually differing in the value of the predetermined parameter.

18.   Device as claimed in claim 17, wherein the converter comprises means for detecting an additional criterion from the selection of the code word from the subset.

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